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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,171	06/08/2006	Hiroko Uhara	0033-1082PUS1	8945

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BIRCH STEWART KOLASCH & BIRCH  
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FALLS CHURCH, VA 22040-0747

EXAMINER
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GRAVINI, STEPHEN MICHAEL

ART UNIT	PAPER NUMBER
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3743

NOTIFICATION DATE	DELIVERY MODE
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11/05/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,171	<b>Applicant(s)</b> UHARA ET AL.	
	<b>Examiner</b> Stephen M. Gravini	<b>Art Unit</b> 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24-36, 38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-36, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

Claim 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Righi (US 4,182,050). The claims are reasonably and broadly construed, in light of the accompanying specification, to be disclosed by Righi as comprising:

a water tank **G**;

a rotary drum **T** rotatably supported in said water tank;

a door **18'** provided to open/close an opening of said rotary drum; and

an irradiating unit **D** fixed to said door for emitting a light beam including ultra-violet ray into said rotary drum,

wherein said irradiating unit comprises

a light source **13'** emitting said light beam into said rotary drum, a reflector reflecting light emitted from said light source in a direction from the opening of said rotary drum towards a bottom wall of said rotary drum, and a light-transmitting member provided to be located between said light source and said rotary drum in a closed state of said door, protecting said light source from heat and water in said rotary drum,

wherein said door is formed containing an ultra-violet ray absorber, allowing a view of the inside of said rotary drum from outside via said door in a closed state at

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column 4 lines 14-30. Righi discloses the claimed invention except for the step of clothes into and out of the drum door opening. It would have been an obvious matter of design choice to permit clothes insertion and removal through a drum door since one skilled in the would be able to insert and remove clothes from the teachings of Righi regardless of including the step of wherein clothes can be put into or take from the drum. Furthermore, Righi discloses the claimed invention, as rejected above, except for the claimed 280 nm. It would have been an obvious matter of design choice to recite a specific wavelength, since the teachings of Righi would perform the invention, as claimed regardless of the claimed wavelength.

Claims 26-28 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candor in view of Righi. The claims are reasonably and broadly construed, in light of the accompanying specification. Examiner construes the recited “means for” language as invoking the sixth paragraph of 35 USC 112 because of its recitation, modified by functional language, and not modified by sufficient structure, material, or acts to achieve the recited function. The claims are disclosed by Candor as comprising:

a water or washing tank **22**;

a rotary drum **28** rotatably supported in said water tank,

irradiating means **52** for irradiating a light beam including ultra-violet ray into said rotary drum; and

control means **171** for controlling said irradiating means such that a light beam including ultra-violet ray is emitted in said rotary drum after the end of a drying process,

wherein said control means controls said irradiating means such that an irradiating step of emitting the light beam including ultra-violet ray into said rotary drum is performed under a state. Candor also discloses the claimed said control means control said irradiating means such that only an irradiating step of emitting the light beam into said rotary drum can be performed at column 2 lines 30-41, wherein said control means controls a door provided to open/close an opening of said rotary drum such that the door is locked when an irradiating step of emitting the light beam i into said rotary drum is performed at column 2 lines 54-65, door irradiation means configuration and said irradiating means is provided on said water tank such that the light beam being emitted to an outer circumferential surface of said rotary drum, and a plurality of through holes penetrating to the inside of said rotary drum are formed in said outer circumferential surface of said rotary drum as shown in figure 1. Candor discloses the claimed invention, except for the feature where temperature in said rotary drum is maintained at least 30°C and at most 60°C after cooling down subsequent to the end of the drying process. It would have been an obvious matter of design choice to recite a specific temperature, since the teachings of Candor would perform the invention as claimed regardless of the claimed temperature. Furthermore, Candor discloses the claimed invention, as rejected above, except for the claimed 400 nm and halogen lamp and various means for specific temperatures. It would have been an obvious matter of design choice to recite a specific wavelength and a type of lamp or various means for

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specific temperatures, since the teachings of Candor would perform the invention, as claimed regardless of the claimed wavelength or lamp or various means for specific temperatures. Candor discloses the claimed invention, except for the ultraviolet ray. Righi, another wishing and drying machine, discloses that feature as discussed in the first obviousness rejection above. It would have been obvious to one skilled in the art to combine the teachings of Candor, with the ultraviolet rays of Righi, for the purpose of disinfecting laundry while irradiation through drying. Furthermore, Candor in view of Righi discloses the claimed invention, as rejected above, except for the claimed component containing an ultra-violet ray absorber, and being formed to shot off ultra-violet ray. Righi, another washing and drying machine, discloses that feature at column 4 lines 14-30. It would have been an obvious to one skilled in the art to provide the teachings of Candor with a component containing an ultra-violet ray absorber, and being formed to shot off ultra-violet ray, as disclosed in Righi, for the purpose of allowing ultraviolet light to be absorbed in desirable contents of the machine for treatment and prevent over exposure damage.

Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candor in view of Righi. Candor discloses the claimed invention except for the claimed shutting off means. Righi, another washing and drying machine, discloses that feature at column 3 lines 47-50. It would have been an obvious to one skilled in the art to provide the teachings of Candor with a shutting off means, as disclosed in Righi, for the purpose of allowing ultraviolet light to be absorbed in desirable contents of the machine for treatment and prevent over exposure damage. Furthermore Candor in view of Righi

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discloses the claimed invention, as rejected above, except for the claimed halogen lamp. It would have been an obvious matter of design choice to recite a type of lamp, since the teachings of Candor would perform the invention, as claimed regardless of the claimed lamp.

Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Candor in view of Toshihiro (JP 10-043481). Candor discloses the claimed invention except for the claimed control means and associated door lock. Toshihiro, another washing and drying machine, discloses that feature on the face of that reference. It would have been an obvious to one skilled in the art to provide the teachings of Candor with a control means and associated door lock, as disclosed in Toshihiro, for the purpose of allowing ultraviolet light to be absorbed in desirable contents of the machine for treatment and prevent over exposure damage.

### ***Response to Arguments***

Applicant's arguments filed September 10, 2008 have been fully considered but are moot-in-part based on the new grounds of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 571 272 4875. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth B. Rinehart can be reached on 571 272 4881. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen Gravini/  
Primary Examiner, Art Unit 3749